CLAIMS

What is claimed is:

1. A method for the cogeneration of Heat and Power where one or more independent from the heat consuming process Electricity Generating Devices –EGD- e.g. gas turbines or recuperative gas turbines or reciprocating engines etc.– send their exhaust gases in the firing region or the combustion room of a kiln or a furnace after all these exhaust gases having increased their temperature by cooling the fired material or the exhaust gases exiting the firing region or the combustion room of the furnace or the kiln and are used as oxidiser to support the combustion of additional fuel in the firing region or the combustion room of the kiln or the furnace.
2. Method for the cogeneration of Heat and Power as described in claim 1 where, part of the EGD(s) exhaust gases is fed as in claim 1 to the firing region, the other part being fed to the burners or to other uses.
3. A method as described in claim 1 where the EGD exhaust gases increase their temperature exchanging their heat via a heat exchanger with the kiln exhaust gases before they are fed in the firing region of the kiln or furnace.
4. A method as described in claim 1 where the EGD exhaust gases increase their temperature exchanging their heat via a heat exchanger with the fired material before they are fed in the firing region of the kiln or furnace.
5. A method as described in claim 1 where the EGD exhaust gases increase their temperature in touch with the fired processed material before they are fed in the firing region of the kiln or furnace.
6. A method as described in claim 1 where the oxygen content of part or all of the EGD(s) exhaust gases is enhanced, with pure oxygen or even air at various flow-rates and temperatures in order to achieve better combustion conditions.
7. A method as described in claims 1 to 6 where the burners are regenerative, radiant, porous, or flameless burners.